STRAW BALE PLACEMENT DETAILS

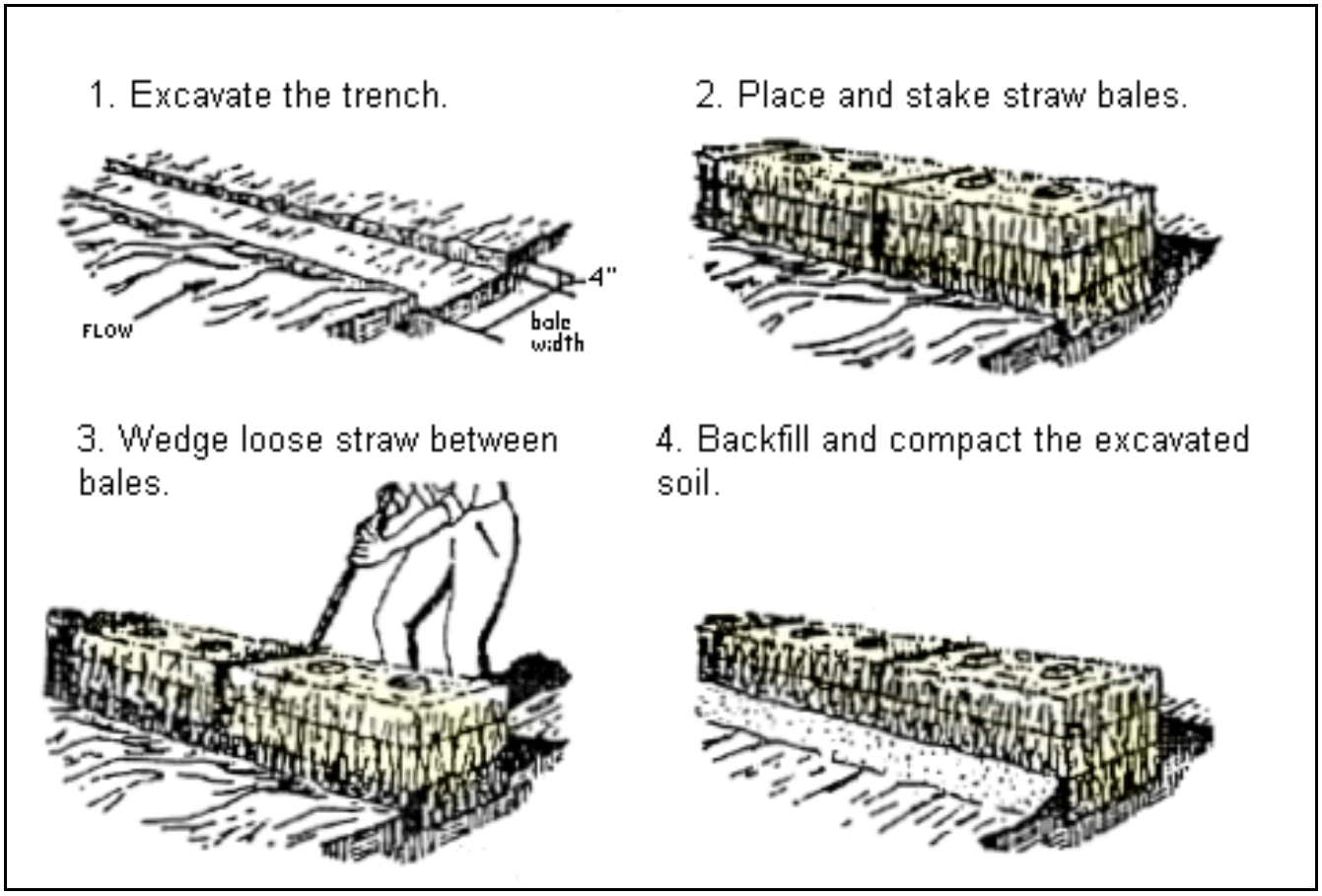

Figure 1

CONSTRUCTION OF A STRAW BALE BARRIER

STRAW BALE PLACEMENT DETAILS

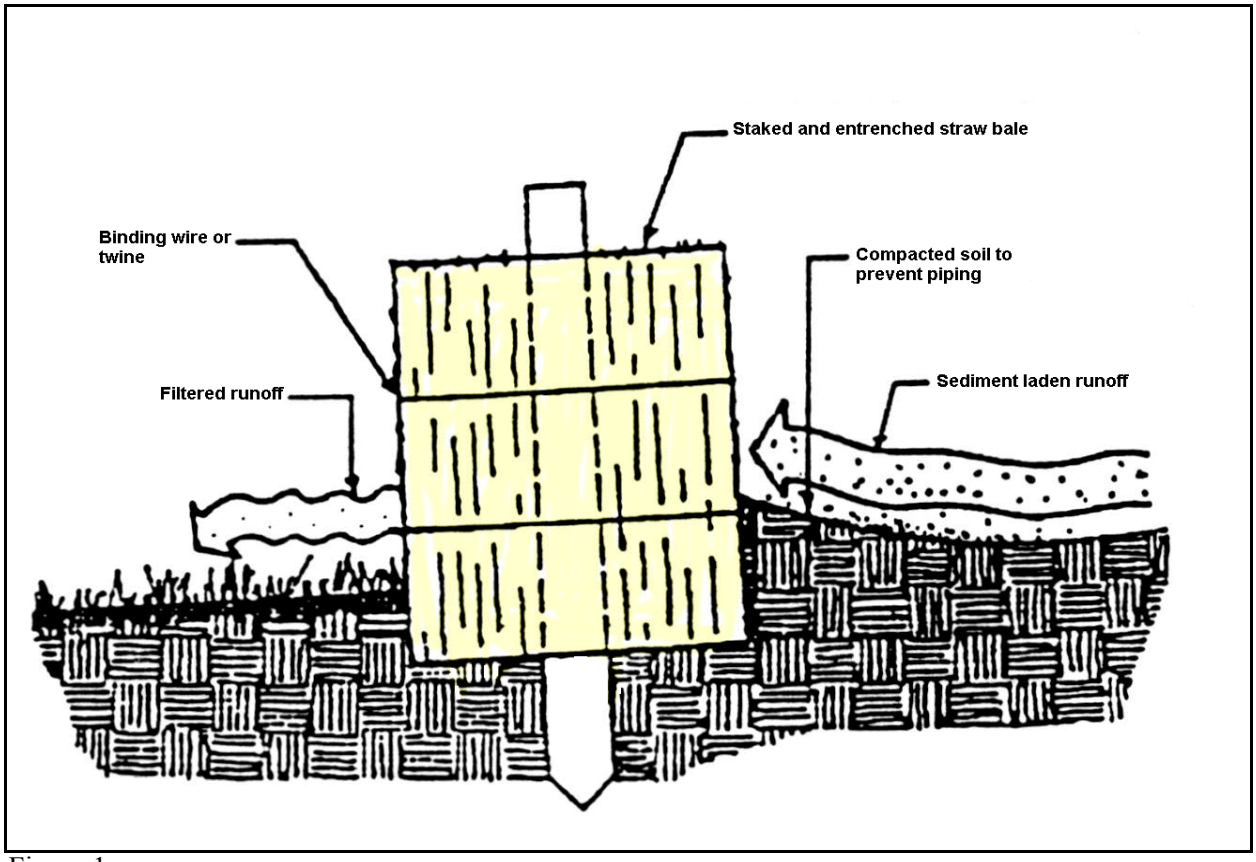

Figure 1

CROSS SECTION OF PROPERLY INSTALLED STRAW BALE

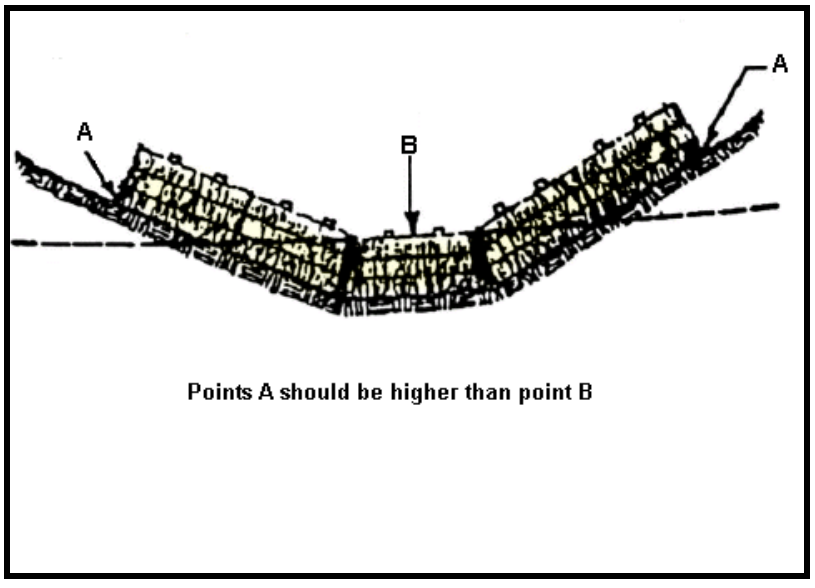

Figure 2

PLACEMENT OF STRAW BALE BARRIER IN DRAINAGE WAY

STRAW BALE PLACEMENT NOTES

I SHEET (OVERLAND) FLOW APPLICATIONS

1. Bales shall be placed in a single row, length on the contour, with both ends of adjacent bales tightly abutting one another.

2. All bales shall be either wire bound or string tied. Straw bales shall be installed so that the bindings are oriented around the sides rather than over and under the bales to prevent deterioration of the bindings.

3. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of one bale and the length of the proposed barrier to minimum depth of four (4) inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to four (4) inches against the uphill side of the barrier (see Appendix B - Exhibit I, page one and figure 1. on page two).

4. Each bale shall be securely anchored by at least two (2) stakes or rebars driven through the bale.

5. The gaps between the bales shall be chinked (filled by wedging) with loose straw to prevent runoff leakage between bales.

II CHANNEL FLOW APPLICATIONS

1. Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with adjacent bales tightly abutting one another.

2. See steps 2. through 6. for sheet flow applications.

3. The barrier shall be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale (Appendix B - Exhibit I, page 2 - figure 2).

III MAINTENANCE

1. Inspections shall be frequent and after each rainfall.

2. Close attention shall be paid to the repair of damaged bales, end runs, and the undercutting of barriers by runoff.

3. Sediment deposits must be removed when the level of deposition has reached approximately one-half the height of the barrier.

4. Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

FILTER BARRIER PLACEMENT DETAILS

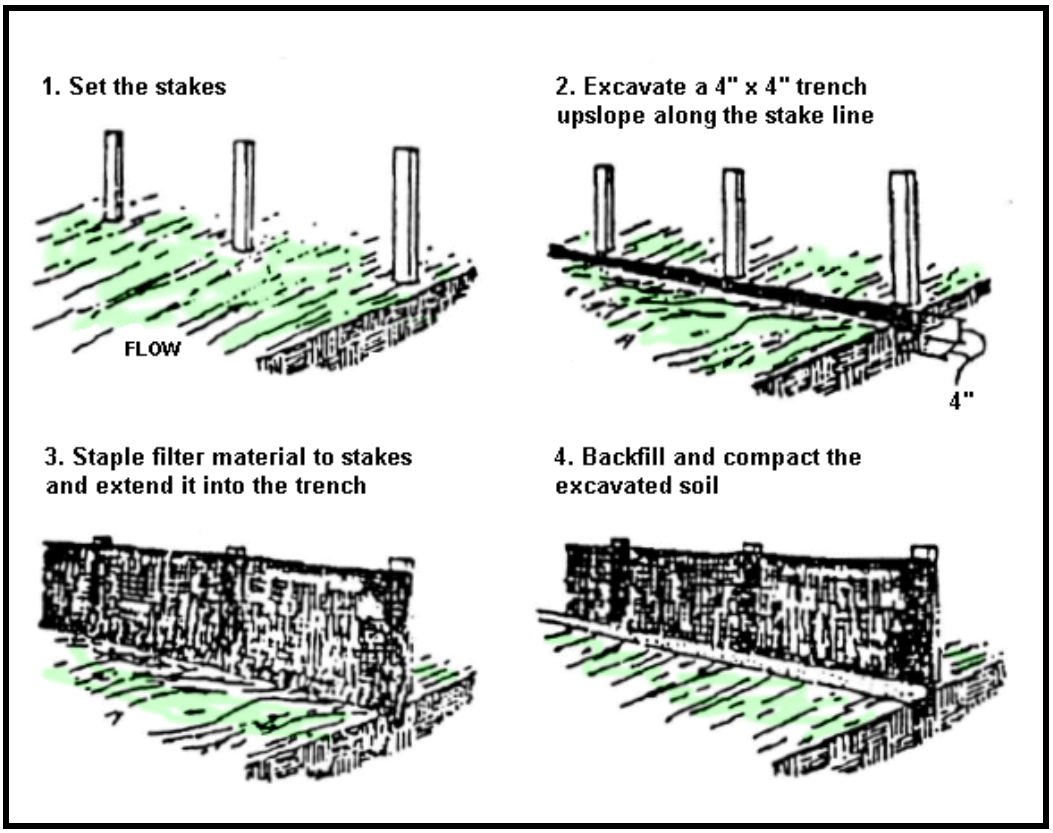

Figure 1

STAKED FILTER BARRIER CONSTRUCTION

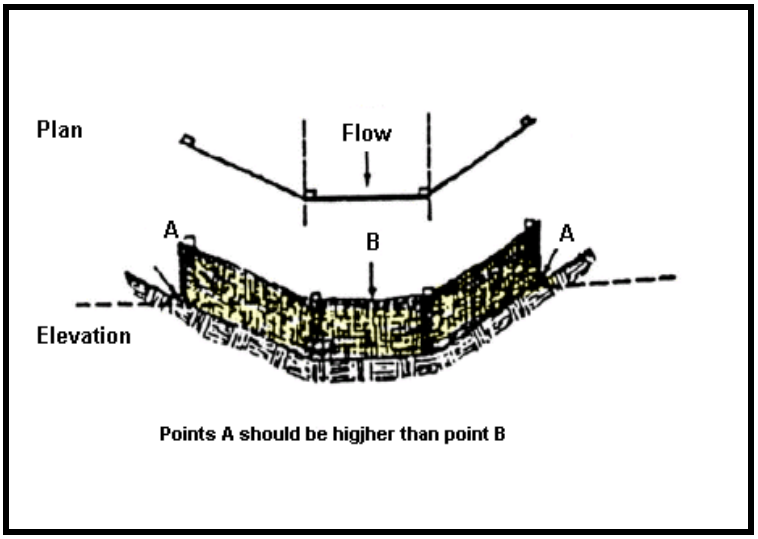

Figure 2

PLACEMENT OF STAKED FILTER BARRIER IN DRAINAGE WAY

FILTER BARRIER PLACEMENT NOTES

I FOR SHEET AND CHANNEL FLOW

1. The height of the filter barrier shall be at least fifteen (15) inches and no greater than eighteen (18) inches.

2. Burlap or standard strength filter fabric shall be purchased in a continuous roll to avoid joints.

3. Stakes for filter barriers shall be one inch by two inch (1" x 2") wood or equivalent metal with a minimum length of three (3) feet.

4. Maximum stake spacing shall be three feet.

5. A four inch by four inch (4" x 4") trench along the line of stakes and upslope from the barrier.

6. The filter material is extended into the trench.

7. The trench shall be backfilled and the soil compacted over the filter material (see Appendix B - Exhibit II, page 1, figure 1).

8. If a filter barrier is to constructed across a ditch line or swale, the barrier shall be of sufficient length to eliminate end flow, and the plan configuration shall resemble an arc or horseshoe (see Appendix II - page 1, figure 2) with the ends oriented upslope.

II MAINTENANCE

1. Filter barriers shall be inspected after each rainfall.

2. Sediment removal shall occur when the deposits reach approximately one-half the height of the barrier.

3. Any sediment deposits remaining in place after the filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

SILT FENCE PLACEMENT DETAILS

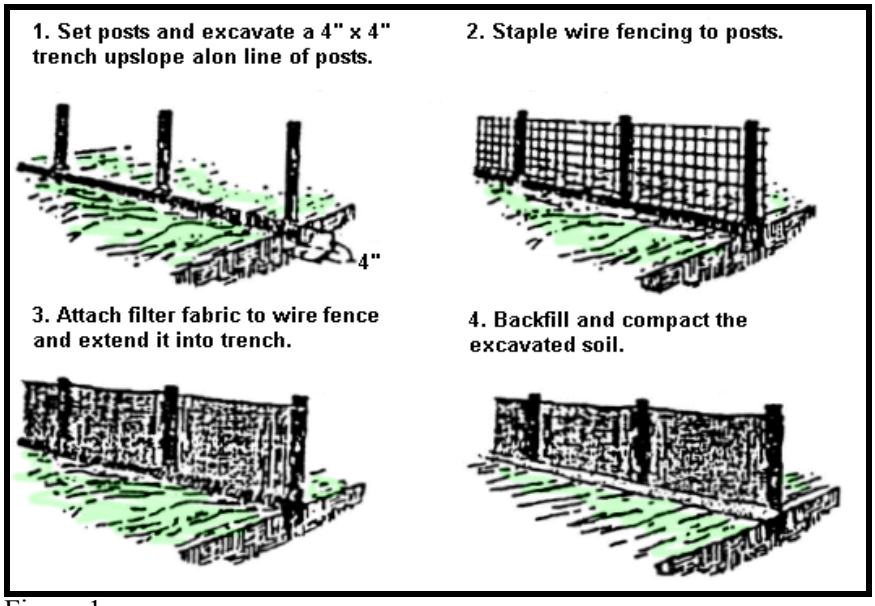

Figure 1

POSTED SILT FENCE CONSTRUCTION

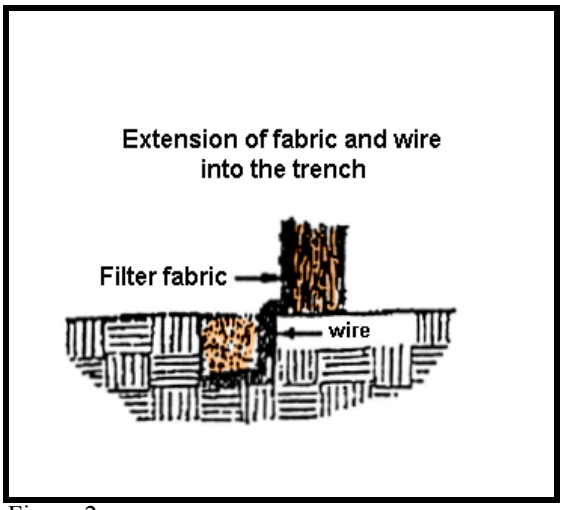

Figure 2

SECTION THROUGH TRENCH

SILT FENCE PLACEMENT NOTES

I FOR SHEET OR OVERLAND FLOW ONLY

1. The height of the silt fence shall not exceed thirty-six (36) inches.

2. Burlap or standard strength filter fabric shall be purchased in a continuous roll to avoid joints. A six inch lap is required at a post for all necessary joints.

3. Stakes for silt fences shall be four (4) inches diameter wood or 1.33 lbs/lin ft. steel with a minimum length of five (5) feet.

4. Maximum post spacing shall be ten (10) feet when wire support fence is used and a maximum of six (6) feet when no wire support is used.

5. A four inch by four inch (4" x 4") trench along the line of stakes and upslope form the barrier.

6. When standard strength fabric is used, with standard post spacing, a wire support fence shall be used and must be extended into the trench a minimum of two (2) inches.

7. When extra-strength fabric is used in conjunction with closer post spacing the fabric can be stapled directly to the posts with eight (8) inches of fabric extending into the trench.

8. The trench shall be backfilled and the soil compacted over the filter material (see Appendix B - Exhibit III, figures 1 and 2).

II MAINTENANCE

1. Silt fences shall be inspected after each rainfall.

2. Sediment removal shall occur when the deposits reach approximately one-half the height of the silt fence.

3. Any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

STORM DRAIN INLET PROTECTION

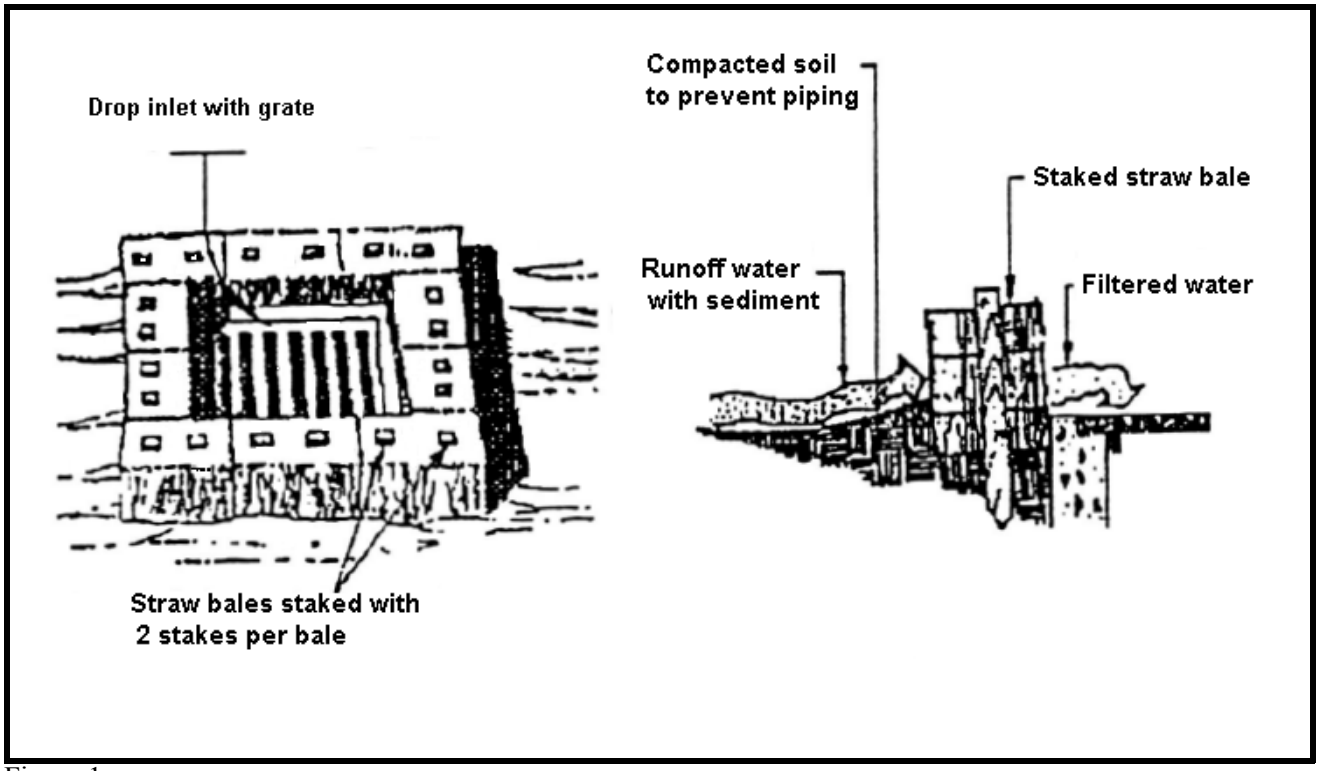

Figure 1

STRAW BALE DROP INLET SEDIMENT FILTER

This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than five (5) percent) where sheet or overland flows (not exceeding 0.5 cfs) are typical.

STORM DRAIN (STRAW BALE) INLET PROTECTION NOTES

I CONSTRUCTION SPECIFICATIONS

1. Bales shall be either wire bound or string-tied with the bindings oriented around the side rather than over and under the bales.

2. Bales shall be placed lengthwise in a single row surrounding the inlet (see Appendix B - Exhibit IV, figure 1), with the ends of adjacent bales pressed together.

3. The inlet protection shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of a bale to minimum depth of four (4) inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the straw bales.

4. Each bale shall be securely anchored and held in place by at least two stakes or rebars driven through the bale.

5. Loose straw shall be wedged between bales to prevent runoff from entering between bales.

II MAINTENANCE

1. The structure shall be inspected after each rain and the necessary repairs made.

2. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one-half the design depth of the trap.

3. Structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.